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ABSTRACT

This document argues for the utility of mapping knowledge perspectives as a kind of cognitive art, or play of figuration to help orient educators to knowledge communities and their cultural codes, and to reinscribe modernist vocabularies into post-modern ways of seeing and representing educational change knowledge. A perspectivist approach is used to examine educational change discourse in comparative and international education texts since the 1950s. Diverse ways of seeing, discovered using textual exegesis, may be mapped at macro and meso levels of social reality. Present discourse communities that are discussed include: (1) functionalist, neofunctionalist; (2) radical functionalist, neo-marxist; (3) radical humanist, critical theory; and (4) humanist, interpretevist. The research presents post-modern cognitive maps that reinscribe and structure ways of seeing social and educational phenomena embedded in the semiotic space of literary texts and the intertextual space of educational practice. In one map, paradigms and theories in the field of comparative education have been identified with the use of textual analysis and are presented in topological fashion in a meta-discourse field with four paradigmatic nodes and four theory basins. Textual dispositions regarding social and educational change and characterization of reality are the coordinates used to form the textual orientations in the field. The study uses discourse analysis and phenomenographic methods to examine the weave of discourses and practices about educational change in education texts over time as historically locatable assemblages of cultural codes and practices. Three major orientations to knowledge are identified as orthodox, heterodox, and emerging heterogeneous. (DK)

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MAPPING KNOWLEDGE PERSPECTIVES IN STUDIES OF EDUCATIONAL CHANGE*

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Mapping Knowledge Perspectives in Studies of Educational Change

> "Aporia is a figure whereby a Speaker sheweth that he doubteth either where to begin for the multitude of matters, or what to do or say in some strange or ambiguous thing."[1]

> "Only metaphysicians [i.e., those who argue for a privileged final vocabulary] think that our genres and criteria exhaust the realm of possibility. Ironists continue to expand that realm."[2]

> "In the 1990s post-modernism has become a mature and multifarious movement that cannot be ignored by practitioners of the human studies. It is situated throughout the reaches of discursive space. The point is to domesticate it by selective appropriation rather than take it whole or attempt to wish it away."[3]

Today, long dominant goals and assumptions underlying modern theories of education and society are undergoing a ravaging subversion. Post-structuralist, post-modernist, post-patriarchal, post-Marxist--yea, post-everything it would seem--theories push forth new ways of seeing and being grounded in, paradoxically, anti-essentialist and anti-foundationalist ideas. Social relations and basic notions of reality and knowledge production undergo fragmentation, and many educators find themselves confused and disoriented in a shifting intellectual landscape with new knowledge communities speaking seemingly incomprehensible research languages. Surprisingly swift and unexpected, this rupture is also imploding the study of educational change. Now no meta-narrative, or grand theory, be it positivism or humanism, functionalism or Marxism can credibly claim hegemonic privilege and the right to fill all the space of truth or method. Given this spread of ontological and epistemological pluralism, how are we as educators and scholars to move past our present unsettling aporia, into a post-modern space of heterogeneous knowledge relations more appropriate to our time?

In this chapter I argue for the utility of mapping knowledge perspectives as a kind of cognitive art, or "play of figuration" to help orient educators to knowledge communities and their cultural codes, and to reinscribe modernist vocabularies into post-modern ways of seeing and representing educational change knowledge. To do this, I use a "perspectivist" approach to examine educational change discourse in comparative and international education texts since the 1950s, and suggest how the diverse ways of seeing discovered using textual exegesis may be mapped at macro and meso levels of social reality. Here I am guided by Bourdieu's notion of "habitus" where intellectual fields are viewed as systems of "durable, transposable

dispositions" produced by a dialectical interaction with objective structures and actors' views of the world.[4]

To reveal such dispositions I use Barthes' notion of text, as an arrangement in a certain order,[5] as "that social space that leaves no language safe or untouched, that allows no enunciative subject to hold the position of judge, teacher, analysis confessor, or decoder" (p. 51). This interpretive approach is a political and intellectual practice used to compare educational texts intertextually--i.e., in relation to other texts, rather than in relation to their authors. A distinction between the work and the text should also, perhaps, be noted. Where literary works are concrete and visible, the text reveals and articulates itself according to and against certain rules. Where the work is held in the hand, the text is held in language. Here the original modernist linking of subject (author) and object (work) is replaced with practices (writing) and the intertextual (field). This relationship of the text to its intercultural field, as illustrated in the three figures following, is creative, active, and practical. Texts are seen to interact continuously in an open field which they produce and by which they are produced, and in which they may be interpreted, typed and topographically mapped. The guiding idea here is phenomenographic. It is well expressed by Olsson's argument that "To understand is to condense a thought-position into a point and then place it in relation to other points"[6] In this chapter, I use a phenomenographic analysis to enter into texts and type points, or thought positions, in some sixty exemplar studies that seek to explain educational change theory and practice. These positions, once discovered, are then transferred to a two dimensional space. The ensuing cognitive map of disparate yet interrelated points is, accordingly, a provisional construct, one old social mapper's unique contribution to understanding difference.

Changing Representations of Educational Change Knowledge

While comparative educators only recently began to discuss explicitly their theoretical framing dispositions following the appearance of Thomas Kuhn's magnum opus, *The Structure of Scientific Revolutions* in 1962, implicit knowledge perspectives can be identified in the field's early discourse. The 18th and 19th Century foundational texts of Berchtold, Jullien and Basset, for example, all advocate encyclopedic description and macro comparisons of public instruction in order to generalize on its efficiency in the then emergent project of individual and social modernity. With the ensuing construction of national systems of education in the industrial, or modern world, and their transfer in part to the colonized world, comparative educators shifted

their attention to the study of social forces and contexts in the shaping and differentiation of these systems. By 1950, the stories of Sadler, Kandel and Hans--among others--helped to consolidate the paradigm of modernity (see Figure 3) as the dominant, even if implicit and unspoken, way of representing or modeling national and crossnational educational phenomena.

Figure 1 below seeks to capture changing textual knowledge orientations in exemplar comparative education scholarship during three major periods: i.e., in the 1950s and 1960s when an orthodoxy of functionalist and positivist ways of seeing dominated discourse; in the contentious 1970s and 1980s when the radical functionalist, humanist and radical humanist paradigms challenged positivist and functionalist hegemony, and unresolved heterodox struggles to replace one master narrative with another prevailed; and in the emergence of a more heterogeneous post-paradigmatic period of competing cultural clusters and proliferating mini narratives as we move into the 1990s.[7] To facilitate comparison, Figure 1 identifies eight kinds--or directions--of hermeneutic, or discursive reference within the texts noted, i.e., the representation of knowledge control and organization; of knowledge and ontology, framing, and style; of knowledge, gender and emotions; and of knowledge products. As Gottlieb points out, formal methods of discourse analysis are relatively new in educational studies. From this perspective, knowledge is not "found" using positivist procedures, but is constructed in and through the discourses of distinct and specifiable cultural clusters, or knowledge communities. Discourse analysis seeks to identify patterns of language that both shape and reflect what is called "thinking," i.e., the basic intellectual commitments held in language.[8] These commitments, or characteristic dispositions, are presented in Figure 1 as a "bricolage," i.e., an assemblage of cultural odds and ends. Bricolage, as a tinkering with disparate ideas, serves as a metaphor for the systems of thought through which texts are seen to classify the components of the world and the myths through which texts explain themselves. These myths and systems are not united by logical continuity nor are they totalizing. Bricolage, as a non-hegemonic alternative to Western rationalism--which seeks to unify totality according to a system patterned after deductive logic---is revealed in constructed cultural complexes without reference to some ulterior reality.

FIGURE 1 ABOUT HERE

Orthodoxy

Following World War II with the crises of decolonization and cold war competition, comparative education studies--and especially those in North America--continued to be framed in evolutionary and functionalist perspectives while moving closer to the social sciences and their

concerns to secure progress through social and economic development. Using the vocabulary, if not the experimental "rigor," of the natural sciences, comparative and international education studies flourished during these decades of functionalist and positivist orthodoxy and drew strength from the creation of scholarly journals in the field, an increase in governmental and foundation support, and the founding of numerous comparative education centers in leading US and European universities.

At the University of Chicago's prestigious Comparative Education Center, for example, the first director C. Arnold Anderson, argued in a foundational text (1961) that the ultimate aim of comparative education must be--as with the social sciences--systematic knowledge of causation, i.e., the shaping of the results of analysis into law-like generalizations. Where half a century earlier educational research and educational psychology programs had gained entrance and eventual methodological respectability in major European and North American universities using statistics and experimental methods, Anderson argued that comparative education should seek acceptance with a strategy of: 1) integration with the social sciences, 2) the use of the natural sciences model of hypothesis testing and analysis of co-variation, and 3) a commitment to theoretical explanation and generalization.[9]

To this end, Anderson proposed a strengthening of two broad yet complementary approaches to comparative education and their integration into social science research. The first, intra-educational analysis generating strictly educational data, viewed education as if it were an autonomous social system. This strand would generate the statistical correlations and "hard" data seen as indispensable for comparing educational systems and practice. The second approach, inter-disciplinary research on educational-societal relations, would examine the social, political and economic functions and tasks laid upon the schools by a society. Anderson's strategy for the creation of a more systematic and social scientific comparative education found strong support in related efforts to establish the field both in the United States and in Western Europe. Anderson saw only hypothesis testing using nomothetic and functional approaches as suitable knowledge framing ideas if comparative education aspired to capture relevant aspects of "the concrete reality" (p. 11).

Bereday also proposed a comparative methodology that built upon positivist and evolutionist assumptions, yet chose instead to stress the need for an inductive non-social science comparative methodology capable of simultaneous analysis of educational practice across national frontiers. Ideally, hypothesis testing to advance the identification of laws in

Characteristics of Textual Representations	Linear 1950s - 1960s	Branching 1970s - 1980s	Intertwined 1990s -
Knowledge Control and Organization:	Orthodoxy; hierarchial and centralized	Heterodoxy: Emergence of "neo-" variants and new inquiry perspectives	Heterogeneity: Disputatious yet complementary knowledge communities
Knowledge Relations:	Hegemonic and totalizing	Paradigm clash -- i.e., "either/or" competition of incommensurable world views	Emergent post-paradigmatic -- i.e., rhizomatic and interactive
Knowledge Ontology:	Realist views predominate	Realist and relativist views contest reality	More perspectivist views encompass multiple realities & perspectives
Knowledge Framing:	Functionalism and positivism dominant	Functionalist, critical and interpretive views compete and decenter	More eclectic, reflexive and pragmatic
Knowledge Style:	Parsimonious and value-free	Agonistic and partisan	Increasingly intertextual, ecologistic, & contingent
Knowledge/Gender:	Maleness: Logic dominant	Feminist ideas emerge, compete, decenter	Gender issues more open and indeterminate
Knowledge/Emotions:	Optimism and confidence	Disdain, incredulity, or exhilaration	Ambivalence -- i.e., nostalgia for certainty; delight in diversity
Knowledge Products:	Law-like crossnational statements the ideal	Competing ideologies	Explanation, interpretation, simulation, translation and mapping
Illustrative Texts:	Adams & Farrell (1969); Anderson (1961); Bereday (1964); Husén (1967); Noah & Eckstein (1969); Schultz (1961)	Anderson (1977); Bourdieu & Passeron (1977); Bowles & Gintis (1976); Carnoy (1984); Clignet (1981); Epstein (1983); Heyman (1979); Husén (1988); Karabel & Halsey (1977); Kelly & Nihlen (1982); Paulston (1977)	Altbach (1991); Cowen (1990); Lather (1991); Masemann (1990); Paulston (1990; 1993); Paulston & Tidwell (1992); Rust (1991); Stromquist (1990); von Recum (1990)

Figure 1. A "bricolage," or assemblage, of changing representations of educational change knowledge in comparative and international education texts. 1950s-1990s.

comparative education might also follow. Bereday's methodology-driven approach sought to develop an increasingly analytical but dispassionate field akin to comparative politics and comparative religion, i.e., a field "unhampered by ethical or pragmatic considerations."[10]

In a closely related text, Noah and Eckstein argued that a more scientific comparative education would not be found in comparative method alone, as advocated by their teacher Bereday, but in a more rigorous inductive method as proposed by Cohen and Nagel in their *An Introduction To Logic and Scientific Method*. Noah and Eckstein saw the attainment of rigorous scientific explanation in comparative education as a difficult goal, but one most likely to result from a methodological empiricism grounded in functionalist assumptions that avoided reflection on ideology and theory. Their research framing choices focused on testing low level propositions about the relationship of education to society. Questions about the form and function of schooling would be restricted to matters of pedagogical efficiency, and correlational analysis of educational relations with more complex systems. Here the correlational method was seen as a defining if imperfect substitute for experimentation. Explanation in comparative education is presented as progressive, i.e., as an evolutionary process proceeding sequentially from: a) curiosity, description and primitive quantification to b) qualitative interpretation examining forces and factors, to c) sophisticated quantification offering a means of rigorous scientific testing to support policy and planning, to d) "scientific prediction."[11] The empirical science model would, Noah and Eckstein contended, bring comparative education into a condition of epistemological modernity at a time when, ironically, not only scientism, but the very foundations of modernity were coming under serious attack in the social sciences and the humanities as well.[12]

The International Evaluation of Educational Achievement Project (IEA), widely reported by Husén and others brought to fruition these antecedent calls for a more scientific comparison of educational practice in schools around the world. Driven in part by U.S. fears following Sputnik, and Western European concerns with the emergence of mass secondary education, the IEA project drew most heavily on empirical and quantitative traditions of measurement as developed in educational psychology. For the first time, comparative educators would measure international differences in school achievement using internationally developed objective tests in what was claimed to be a pathbreaking effort to account for variations in test results. In time, Husén suggested, a more scientific understanding of intellectual functioning and curriculum would produce efficient and predictable instructional practices.[13] The project also provided a

working model of a new comparative education seeking causal explanation grounded in correlational studies rather than the narrative description and moral exhortation commonly found in earlier studies. With the involvement of comparative educators from Teachers College, Columbia University, the Universities of Chicago and Stockholm, and numerous ministries of education around the world, the project optimistically sought to validate the scientific aspirations of the field in the 1950s and 1960s. Viewing the world as an educational laboratory, and using comparative and correlational methods, the IEA project initially expressed the aim of discovering a wide range of cognitive, pedagogical, and curricular universals. After decades of testing, considerably less grand findings pointed to the importance of unintended outcomes of schooling, and the dangers of too much data and too little conceptual modeling. Both comparison and policy implications remained problematic given the Project's dependence on precoded, forced choice survey questions, and a near total lack of attention to questions of meaning and context, i.e., to the consequences of educational embeding in complex webs of cultural, economic and political relations.

By the late 1960s a number of international funding agencies and comparative educators turned their attention to educational change efforts in Third World settings, a new branch of comparative education that addressed problems of educational planning, development, and theory construction in largely macro studies of education and social change. In what might be seen as a canonical text representing this structural-functional variant of the prevailing orthodoxy, Adams and Farrell proposed that the primary purpose of comparative and development studies should be the generalization and specification of testable propositions, or statements of relations across objective variables.[14] Scholars in comparative education were seen to have been most reluctant to undertake this task; thus, . . . "our knowledge remains scattered and unsystematic." The authors' corrective advocated a structuring of knowledge within and across educational systems according to Parsonian notions of unilineal differentiation, a process that "will follow an approximately similar sequence in all societies" undergoing modernization.[15]

Heterodoxy

By the early 1970s, the modernist project had achieved regnant status in comparative and international education studies at the same time it came under widespread attack in the social sciences and in development studies from a combination of emergent critical and interpretive knowledge communities.[16] Reasons for the vulnerability and eventual decentering of

functionalism are suggested in the shift from a segregated to a plural society in the U.S. With cultural pluralism came new advocates of epistemological and ontological pluralism. Functionalist theory, moreover, proved unable to adequately predict, control or explain frequent development failures.[17] Equally important, the rise of a global field with numerous new scholars and comparative education programs in Europe, Asia and in the Third World saw an increased recognition of antithetical neo-Marxist, critical theory, feminist, hermeneutic, and dependency perspectives. Third World critics especially came forth to challenge what they saw as a self serving, elitist and patriarchal Northern functionalist discourse.[18]

Decentering of the structural-functionalist worldview with its positivist epistemological vision also followed from the publication of Berger and Luckmann's influential text, *The Social Construction of Reality* in 1966. Here the humanist paradigm--and its support of the intersubjective, or social origin of all ideas--branched into ethnomethodological and phenomenological camps (see Figure 3) and strengthened the arrival of a new hermeneutic or ethnographic approach in comparative educational studies.

The radical functionalist worldview first elaborated to explain how education functions to reproduce capitalist structures by Althusser,[19] and later by Bowles and Gintis[20] also rather quickly and effectively mounted a telling critique of structural functionalist explanations of educational change and modernization efforts. Carnoy documents the subsequent appearance in the early 1970s of a variety of neo-Marxist texts rooted in the historical materialist worldview as early examples of such paradigm clash.[21]

During the 1970s and 1980s texts drawing on Marxist radical functionalist counter-orthodoxy greatly increased in number and influence and produced a powerful critique--if not a successor paradigm--to entrenched Durkheimian and Parsonian structural functionalism and its variants in modernization and human capital theories. But, because earlier traditional Marxist-Leninist texts portray education as a repressive state apparatus, they paid little attention to how education might contribute to a revolutionary socialist strategy. By the 1970s, as Carnoy has shown, neo-Marxist researchers gave this latter question their highest priority.

In France, Althusser's 1960s interpretations of Marx has the superstructure--including education--determined by the relations of production. The hegemony of the dominant class was seen to lie in the very relations of the means of production and directly defined the purposes and functioning of the educational system. Thus Althusser saw the educational system

hyperfunctionally--i.e., it necessarily reproduced the relations of production and precluded any counter hegemonic response from educators or students.

In the U.S., Bowles and Gintis applied Althusser's theory of structural correspondence and construed the reality of American education as a direct reflection of the values and relationships of capitalist production. Attempts to reform schools without corresponding changes in the structure of production, they argued, would always fail.

In Britain, Basil Bernstein and the New Sociology of Education school of thought elaborated an eclectic neo-Marxist project, combining perspectives from Durkheim, Marx and socio-linguistics, to study educational institutions as agents of cultural transmission and reproduction. While Bernstein's story of social class influence in the classification and framing of educational knowledge is clearly tied to the radical wing of the "old" sociology of education, he also draws widely upon both the humanist--or interpretive--and functionalist worldviews. In a perceptive assessment, Karabel and Halsey concluded that the macro sociological conflict approach of the American neo-Marxists and the essentially micro-sociological interpretive studies of the British were highly complementary. Both "waged war" against the common enemies of structural functionalist theory and methodological empiricism without ever coordinating their critiques.[22]

By the early 1980s a more humanistic Marxism, or radical humanism, gained prominence in critical studies. Texts framed in this knowledge orientation drew on the earlier critical theory of the Frankfort School now led in Germany by Jürgen Habermas, in North America by Henry Giroux, and in the third world by Paulo Freíre. As a branch of this intellectual movement, numerous radical feminist texts also began to draw upon critical theory's agenda for the liberation of consciousness. Here critical theory texts use a negative dialectical argument to expose education's role in the patriarchal domination of women, much as capitalists are seen to dominate workers in Marxist texts. Kelly and Nihlen, for example, critiqued all existing comparative education texts for their silence on education's role in the reproduction of gender inequality.[23] They also presented a reflective critique of their own rigid reproduction framework and found that it too "fails both to deal with 'deviations' and chart how and when they occur or become significant." The answers, they argued, will not come from deterministic functionalist or radical functionalist analysis of structure or history, but from interpretive research rooted in the humanist and radical humanist paradigms. These worldviews will reveal

how women experience and interpret education in their everyday lives, and how they come to see and resist domination by making the invisible visible.[24]

With the spread of ontological pluralism and the decentering of positivist dominance in the social sciences over the 1970s and 1980s, humanistic or interpretive research framing choices also began to appear in comparative education texts. An illustrative text by Heyman, for example, laid out an alternative ethnomethodological knowledge orientation, a rationale to replace narrow functionalist and positivist approaches with an agenda for ethnographic inquiry in the field.[25] Heyman's 1979 text contends that comparative education has not provided useful knowledge to educational planners, policy makers and reformers because of its decontextualized commitment to social "facts" (i.e., the IEA study), its narrow sole interest in functional and structural relationships (i.e., modernization and Marxist research), and its focus on reified social science indicators rather than on interaction among participants in everyday social and educational environments. Research based on the measurement of indicators as proxies for theoretically related concepts result, according to Heyman, in a gross distortion of the very social reality that comparativists seek to reveal and understand. His heterodox argument builds upon Garfinkel's work of the 1960s and calls for the replacement of all positivist and materialist methods with interpretive approaches claimed to be better able to observe, describe and interpret the "reality" of our daily existence. Ethnomethodology, i.e., the study of how individuals engage in reality-making processes, is proposed because it promises to capture more of the continuous production of social reality in human interaction than do correlational studies. Correlational studies assume that objects cannot be two things at once or that objects have stable, discreet, and permanent properties--assumptions more appropriate for inquiry in the physical sciences. For Heyman, the level of analysis in comparative studies must shift from macro to micro, from an objectivist-realist to a subjectivist-relativist ontology, and to the study of everyday life. Comparative education research must stop "pretending to be scientific" and instead become microscopic, steer a heuristic course, and build its comparative interpretations and theories through replication.

In a related paradigmatic study, Clignet also rejects both functionalist and radical functionalist, or Marxist, worldviews. Despite their apparent differences, Clignet demonstrates that both paradigms share a number of weaknesses.[26] Both use effects to explain events and both stress vertical hierarchical relations at the expense of horizonal interactive relations. With their unwavering focus on structure, both ignore how assimilation and replication process

performed by schools are contingent on critical sets of interaction among individuals and social groups located within the same layers of social reality. Both perspectives prevent researchers from analyzing the various mechanisms used by schools in assimilation and replication functions, and both prevent researchers from differentiating between educational interactions and their outcomes in students' life chances. Instead, Clignet looks to behavioral science and proposes a biological or psychological framework that distinguishes the perspective of each individual organism and differentiates its modes of adaption to the environment--in this case, the school environment of teachers and students. This ecologistic approach rejects the notion of universal viability found in functionalist and critical arguments. Instead, it starts at the micro level with biographies of individual actors and analyzes the relationship between educational structures and actions. It sees local adaptation and differentiation as an integral part of social reality, and necessary to historically and culturally contingent strategies if change efforts are to be effective. Accordingly, Clignet argues, the failure of most educational change policies and human capital planning efforts follow from their rigid and uniform top-down pedagogical treatments that "reflect ideological rather than scientific principles." By the mid-1980's all claims to foundational knowledge in the field had become vulnerable to this attack.[27]

The first summary examination of texts seeking to reveal and map paradigmatic and theoretical perspectives in the field appeared in 1977. My phenomenographic typing of how the international educational reform literature explained reform efforts and outcomes produced a heterodox, or bipolar, juxtaposition of texts framed in either equilibrium or conflict worldviews.[28] Reform explanations linked: a) the evolutionary, functionalist and systems ways of seeing with the equilibrium pole, and b) the Marxist, cultural revitalization, and anarchistic/ utopian ways of seeing educational reform to the conflict pole. As texts offering interpretivist, feminist, or problem-approach explanations of educational reform process and outcomes had yet to appear in reform discourse, they were absent from the summary figure. This would not be the case today. As may be seen in Figures 1 and 2, the consequences of subsequent branching and pragmatic entwinement of functionalist, critical and interpretivist knowledge perspectives and the emergence of radical hermeneutic critique and explanation, as especially evidenced in many feminist texts, is clearly apparent and burgeoning.[29]

By the mid 1970s, Anderson somewhat qualified his earlier strong advocacy of a totalizing and hegemonic structural-functionalist approach to comparative education. In response to attacks from advocates of competing holistic-interpretive and critical perspectives,

he cautioned that confusion and "vulgar functionalism" indeed arise when investigators "too readily infer ostensible functions of schools from putative societal needs" rather than from strict adherence to "confirmation of many a priori hypotheses" concerning complex matrices of variables explaining functional equivalents among the educational practices of different systems. Despite some pessimism about the state of the art in comparative education, Anderson predicted continued progress in the identification of "functional equivalents for the basic structures and functions of educational systems." He admonished, however, that the price of "progress" would require the exclusion of competing paradigms: "Perhaps, we should cease to speak of society as a 'seamless web' and see it rather as a matrix of .5 correlation coefficients. Accordingly, holistic conceptions of society should be espoused with heavy qualifications, even when we would do not put conflict at the center of our conceptual scheme."[30]

Emergent Heterogeneity

Representations of knowledge in comparative education texts began a shift away from heterodoxy and paradigm clash in the late 1980s.[31] While a few researchers still claim orthodox purity and remain within their exclusive paradigmatic utopias--and some continue unsuccessful partisan efforts to replace one worldview with another--the collapse of grand theory in the social sciences means that no one knowledge community can now claim a monopoly of truth.[32] Rather, a growing number of researchers see all claims to universal, foundational knowledge--be they positivist "science," or interpretivist "science," or Marxist "science"--as incomplete and problematic.[33]

Husén pointed the way past heterodoxy with his recognition that no one paradigm can answer all questions, that all serve to complement disparate worldviews.[34] I too see the field moving from paradigm wars to a global terrain of disputatious yet interactive and often complimentary communities as the use of knowledge becomes more eclectic and reoriented by new ideas and new knowledge constructs flowing from a variety of cultural study approaches in, for example, interpretations, simulations, translations, probes, and conceptual mapping.[35] Knowledge has become more "textual." It is increasingly seen as construction employing a conventional sign system where even non-book texts such as architectural structures, musical compositions, or graphic texts such as maps are seen to "presuppose a signifying consciousness that it is our business to uncover."[36] With the appearance of post-structural and post modern studies, comparative education discourse has also begun this excavation[37] with a shift in

knowledge framing from traditional social science and Marxist science models to perspectives of the interpretive humanities and linguistics.[38]

Discourse Communities Today

Functionalist/Neo-Functionalist

Neo-functionalist theory has seen the growth of numerous vital new branches while the traditional structural-functional root paradigm continues to come under heavy attack from all quarters. Humanist texts, for example, critique functionalism's "anti-individualism" and "downward conflation" where a supposedly integrated cultural system is seen to create a consensus that engulfs the social and personality systems. Radical functionalist texts attack its "conservatism," "idealism," and willingness to accept structured inequality and human misery as the price of social order, efficiency, and homeostasis, or moving equilibrium. Neo-functionalist texts seek to address and move beyond these problems by synthesizing core paradigmatic assumptions with opposing paradigms and other theoretical traditions.

Modernization theory also has several branches. The evolutionary functionalist branch draws heavily on Durkheim and Parsons to explain how increasingly complex and differentiated societies and educational systems create a need for mass schooling. Interventionist attempts to modernize Third World educational systems using top-down planning and innovation based on idealized western economic models and applied science are in deepening crises[39] despite efforts by the World Bank and other international agencies claiming to improve efficiency and productivity.[40] Texts here have for the most part remained closed for decades to the many lessons of an often failed practice.[41]

Neo-functionalists retain Parsons' unflinching logocentrism (i.e., a belief in reason as the controlling principle in the universe) and general social system perspective while opening their texts somewhat to rational actor approaches and interperative perspectives; to conflicting social and cultural factors in educational planning and reform projects (but only at the project level);[42] and to a recognition of the centrality of structured inequality and interest group conflict in explanations of failed educational reform.[43] In Germany, Luhmann argues that the Western type of modern society differentiates subsystems to produce both scientific theories and theories of systemic self-reflection[44]. Framing their story of national educational knowledge patterns in Germany and France in this post-Parsonian perspective, Schriewer and Keiner find a marked "German" preference, or consensus favoring a "hermeneutic-reflective style." The "French" they contend, prefer a "science of education style." Today, these two research orientations have

begun, but only barely, to converge. Perspectives that are outside of their gross "either--or" dichotomy are ignored and thus made invisible, a continuing acceptable practice in functionalist discourse.

Rational choice theory seeks to move action theory away from the macro system level and back towards the actor and possibilities for human agency and more contingent understanding. The leading branch draws upon game theory and empirical analysis to explain how actors predictably interpret and act in social change situations.[45] Rational choice theory is undergoing rapid growth as both neo-functionalists and neo-Marxists now seek to put into place an empirical base of rational choice micro theory to support a diverse variety of macro theoretical constructs. Coleman especially has contributed to the development of a broader action theory which synthesizes interests in actors and systems to clarify the meaning of voluntaristic action.[46] Analytical Marxists as well now freely borrow from rather conservative rational choice and game theory--and even from general equilibrium theory and neoclassical economics--to elaborate the empirical micro grounding of what their radical texts see as macro-social historical materialist processes.[47]

Conflict theory examines symbolic codes and culture-mediated power relations. It draws on both functionalist and macro-historical sociological theory to explain education in contexts of privilege, domination, and cultural reproduction. Building on paradigmatic texts by Weber, Simmel, Dahrendorf, and Collins, conflict theory focuses on the structure and consequences of conflict within social and educational systems. In Europe, the cognitive focus is most often on structuralist theories that treat symbolic codes largely as classification systems. These texts emphasize the rationality of symbolic codes within formal systems of knowledge, and as with Bourdieu and Passeron, often attempt to "de-center" the agency of code production. American and British approaches, in contrast, tend to focus more on the codes themselves.[48] Archer for example, presents a "morphogenetic" explanation where mutual causal processes are seen to counteract systemic stress and to facilitate structural differentiation and increased information flow.[49] Texts emphasizing conflict theory willingly incorporate Marxist ideas,[50] yet reject historicism and see only continued conflict into the future.[51] With its predilection for methodological eclecticism and micro-macro interaction, conflict theory, as in the work of Pierre Bourdieu and Randall Collins, is becoming increasingly attractive as a perspective to study how changing stratification and organization structures are grounded in the interactions, structures, and intersubjectivity of everyday life.

Radical Functionalist/Neo-Marxist

While the sort of traditional Marxist structural determinism associated with Althusser's and Bowles and Gintis' texts of the 1970s has now largely disappeared, neo-Marxist and post-Marxist theory continues--if in something of a state of shock following the collapse of socialist theory and practice in Eastern Europe, in the former USSR, and in much of the Third World. Anticipating this change to some extent, a text by Bowles and Gintis in 1986 moved far beyond the earlier radical functionalist model of social class reproduction and sought to privilege a new post-Marxist theoretical discourse, or "post-liberal democracy," combining features of liberalism and Marxism.[52] Carnoy and Samoff are also concerned to rid their earlier Marxist analysis of its more nostalgic and hyper-functionalist features.[53] They seek to break with orthodox Marxist social class theory and present a less deterministic neo-Marxist "transition-state theory" that emphasizes the role of the state and de-emphasizes the influence of productive forces and class conflict to explanation what they see as Third World "transitions to socialism." Yet, their perspective's inability to recognize--let alone to explain--reverse transitions from socialism to market economies in, for example, the former USSR, Nicaragua, Eastern Europe, and elsewhere gives their text a somewhat teleological cast seemingly at odds with both their findings and with recent historical events.

Radical Humanist/Critical Theory

Cultural rationalization theory also draws upon a number of what were earlier viewed as ideologically incommensurable perspectives.[54] Habermas, the leading theorist in this community, has proposed an ambitious reconstruction of Marx's grand emancipatory narrative. Rejecting both utopian historicism and the endless negative dialectics of the earlier Frankfort School--while continuing to wear his logocentrism on his sleeve, Habermas now seeks a neo-normative foundation in undistorted language communication. Moving toward the pragmatic center, he finds useful bases for cultural reconstruction in linguistic theory, in Mead's intersubjective theory of communicative democracy, in Weber's theories of bureaucracy and progressive cultural rationalization, and in Parson's action theory.[55]

Critical theory, the main branch growing out of radical humanism, has in its many forms been a leading contender over the past several decades of paradigm conflict. It is closely related to cultural rationalization theory but is more normative and directly attacks the repressive character of western reason, culture and society. Marcuse and Freire have, perhaps, most directly influenced comparative educators' use of this perspective in their advocacy of

emancipatory modernity and a revolutionary subject variously resisting domination by the world capitalist system,[56] distorted knowledge relations[57]--or among the feminists--oppressive gender relations.[58] A vital and growing variation of this theoretical framing perspective drawing upon Horkheimer's negative dialectics is also found in several recent critical ethnographic studies. They offer thick descriptions of cultural and economic domination and examine prospects for resistance--supposedly from the actor's viewpoint.[59]

Examples of post-structuralist and post-modernist theory in comparative education texts are as yet few in number. With their variety and resistance to representation, texts infused with post-modern sensibility are also the most difficult to categorize and map. For the most part rooted in both the humanist and radical humanist paradigms (see Figure 2) they focus on cultural codes and reject all meta-narratives (i.e., grand theories), determinism, and universals. They also reject the truth claims of positivist science, of history, and of classical rationalism (i.e., the notion that one can rank knowledge claims according to intuitive truth standards).[60] Instead, the social world is usually portrayed as a collage of blurred genres, of multiple narratives--or, if you will, traces tied to specific forms of empowerment as suggested in Figure 2 following. The time of total relativity is seen to be present everywhere. Post-modern texts attack everything that claims to be free of contradiction, closed, uniform or unequivocal. These claims are usurped by paradox, diversity, ambiguity, and chance.[61] Post-modern deconstruction annihilates stable spaces and permanent boundaries at all levels of reality in a continuous circulation of information. Space is no longer in geography, as in modernist views, but now it is in electronics. And unity is only in the terminals, or nodes. From this perspective's extreme relativism, both society and values tend to disintegrate and post-modern hyperspace creates spatial and social confusion. According to Jameson, it undermines our ability to grasp our positions as individual and collective subjects, and to locate ourselves so as to be able to act and struggle. Science shifts from attempts to discover Truth to the creation of new ideas and a preference for paralogy--i.e., a type of counter-logical analysis. In redefining educational goals, the post-modern perspective avoids the imposition of normative decisions and looks instead to a better understanding of the power relations between various information grids in which education occurs, to local knowledge, to "decentralized small units," and to making the invisible visible.[62]

From the post-modern perspective, the electronic and telecommunication revolutions give a new prominence to language and post-modern science turns to language games as the

minimum relation required for society to exist. Where modernist science permits only the single linear language game of denotation and progress, post-modern "science" favors a "pragmatics" of language game. As in traditional or pre-modern narrative, the positions of speaker, listener, and referent of the narratives are more fluid and interchangeable. Society is seen to be reproduced in a circular, face-to-face fashion. From the post-modern perspective, the discourses of positivist and Marxist science become, for example, just more language games incapable of legitimating, or delegitimating, the other language games. The post-modern perspective rejects the modern belief that theory mirrors reality. From its perspectivist and relativist positions, it contends that, at best, theories provide only partial perspectives on their objects, that all cognitive representations are mediated by language, culture, and history. The notion of totalizing macroperspectives, i.e. paradigms, is rejected in favor of microtheory and a micropolitics that challenges a broad array of discourse and institutionalized forms of power.[63]

It seems likely that post-modern theory with its difficult and provocative new ideas has potential to occupy some of the space vacated by the collapse of modernist grand theories, especially structural-functionalism with its notions of consensus and causality, and Marxist structuralism with its tired global philosophy of the subject and its vision of social evolution as destiny. Instead, post-modern perspectives reject modernity as a historical movement toward control based on foundational knowledge and replace rationality and logic with paralogy, or counter logic, and a concern to allow all to speak and enter the terrain of social agonistics. Its decentering and anti-foundational perspective links power with knowledge and, reflexively, even views emancipatory moral rhetorics as merely another of the forms assumed by power.[64]

Since the beginning of the nineteenth century, comparative education texts have made valuable contributions to understanding educational relations in earlier stories of transformations to capitalism, urbanism and political democracy. Today, with the reinscription and transformation of modernity, post-structural and post-modern ways of seeing offer comparative educators timely yet challenging new perspectives in attempts to theorize the present into as yet unknown educational and cultural patterns.

Humanist/Interpretivist

The pragmatic-interactionist orientation in comparative education texts also rejects totalizing theory and favors interpretive method in attempts to understand how social actors come to consciousness within social structures. It has sought to determine through a better understanding of knowledge in practice and community which perspectives have pragmatic i.e.,

operational and heuristic value.[65] Drawing upon Dewey and Mead--and more recently on neo-pragmatic texts by Habermas and Rorty--pragmatic interactionism offers an intersubjective central space where all paradigmatic perspectives might overlap (see Figure 2), where all worldviews and ways of seeing might interact in the context of a contingent educational change practice, and a pragmatism that claims to be open to difference.[66]

Equally central to the humanist paradigm, the ethnographic perspective favors local knowledge and interpretation over totalizing paradigmatic constructs and modernization agendas for progressive change. In comparative education, this perspective has, for example, been used to describe participant perception of classroom experiences among poor Latin American students[67] and patterns of academic persistence and achievement among immigrant and "involuntary minority" children.[68] While the ethnographic perspective claims to provide description of how ethnic groups and others view and interpret educational practice, ethnographic data as "thick description" have little if any comparative value without the imposition of an ethnological or ideological comparative overlay.[69]

Accordingly, neither Heyman's proposal to replace positivism with ethnomethodological method nor Clignet's call for an exclusive phenomemological approach to comparative education has as yet garnered much support. But with the field now entering a stage of eclectic critical post-positivism, the humanist paradigm with its focus on culture, creativity and emotion is combining with other perspectives in the void left by the deconstruction of the scientific functionalist and the emancipatory grand meta-narratives. Here, phenomenography, or narrative-dependent content, as well shows promise in recent efforts to map increasingly diverse cultural clusters and knowledge communities now interacting within the dynamic intellectual field of comparative and international education texts.[70]

Phenomenography is about the qualitatively different ways in which people experience or think about various phenomena, about the relations between human beings and their world. In comparative education, phenomenographic studies have sought, as in this work, to characterize how researchers see, apprehend, and think about knowledge constructs such as "paradigms and theories" at different times and in different knowledge cultures and subcultures. Through empirical studies as well as textual analysis, phenomenographic studies seek not to describe things "as they are," but how they have been presented as sedimentations of ways of thinking about the world.[71] Categories of description identified in phenomenographic research are seen as a form of discovery and as the main outcomes of such inquiry. Comparison of

alternative perspectives seeks to identify distinctive characteristics or essential structures of each conceptualization, as in this discourse analysis, so they may be made visible, described and mapped.[72]

Mapping Knowledge Perspectives

Earlier examples of mapping knowledge perspectives in comparative and international education texts can be seen in Anderson, where implicitly structural functionalism orthodoxy occupied all space; in Paulston, where polarized equilibrium and conflict paradigms enclosed equal space; in Epstein, where three distinct and supposedly incommensurable and irreconcilable paradigms labeled "neo-positivist," "neo-Marxist," and "neo-relativist" contested space; in Adams' presentation of a multidimensional typology; and in the more interactive "maps" presented in this study.[73] Maps are a distinct mode of visual representation that use space to represent space. They offer, when combined with discourse analysis, a system of possibility for new knowledge. All maps contrast two interdependent planes of reality--the ground or territory. Accordingly, any map is a construct, a conceptual configuration that has been thematized, abstracted and lifted from the ground to another plane of meaning. Topographic maps, for example, reinscribe a place, or "analysis situs," on a flat map surface. In similar fashion, post-modern cognitive maps--as presented here--reinscribe and structure ways of seeing social and educational phenomena embedded in the semiotic space of literary texts and the intertextual space of educational practice.

FIGURE 2 ABOUT HERE

In Figure 2, paradigms and theories in the field of comparative education have been identified with the use of textual analysis and are presented in topological fashion in a meta-discourse field with four paradigmatic "nodes" and four theory "basins." Textual dispositions regarding social and educational change (the verticle dimension) and characterization of reality (the horizontal dimension) are the coordinates used to topologize, or give form--albeit fuzzy--to textual orientations within the field. Arrows are use to indicate genealogy and the directions of knowledge relations. Several advantages of the figure may be noted. It facilitates, for example, a reinscription and resituation of meanings, events and all claimant knowledge communities in an open field. It suggests a dynamic and rhizomatic field of tangled roots and tendrils. Comparative education is now portrayed as a mapping of the intertextual weavings of diverse discourse communities rather than the objectified images presented to the world in earlier foundational texts. The strength of social theory in the field today is in fact firmly

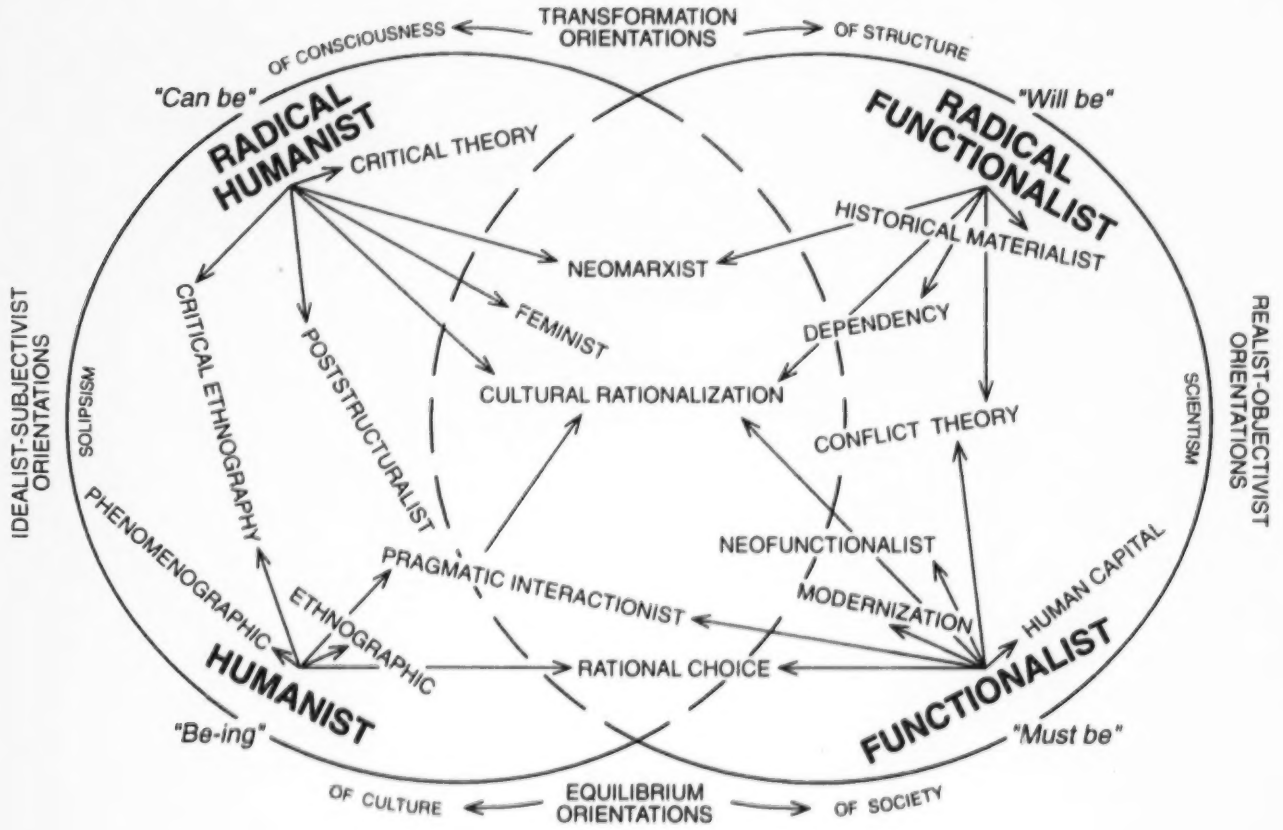

Figure 2. **A meta-discursive mapping of discourse communities in recent educational change studies. This post-modern map opens to all claimants space for inclusion in the intellectual field and social milieu.**

grounded in this very multiplicity of its perspectives and tools known through intertextual composition. Simultaneously, in the shaping and interrelating of knowledge communities, and relations, Figures 1, 2, and 3 introduce into complex systems a fleeting representation of their own complexity, and help new discourse communities find space and voice both on the map and the agonistic field.[74]

The paradox here is that conceptual mapping can create both distorted authoritarian images, as well as new tools to challenge orthodox boundaries and the epistemological myth of cumulative scientific progress. Maps also will vary depending on the mapper's textual orientation and the topological format chosen. With computer technology, cognitive mapping becomes an ongoing, rapidly changing process. Flows of information "can now stake out claims on expanses of pure space in which bodies of knowledge have displaced human bodies and on which all boundaries are tenuous."[75] Today, social cartography offers comparative educators a valuable tool to capture text and context, to transfer the rhetoric and metaphor of texts on to cognitive maps, and to open a way for intertextuality among competing discourses.[76] And when it suits our purposes, maps can also provide a way to see all knowledge thoroughly enmeshed in the larger boundary disputes that constitute our world. Here post-modern social cartography is a critical practice as it questions all inclusions and exclusions, demystifies rhetoric (including its own), and interprets discourse as a site and object of struggle where different groups strive for hegemony in the production of meaning and ideology. By giving structure to new ideas, Fox Genovese contends, cognitive mapping can serve as a means of counterhegemic boundary setting needed to break down unjust established boundaries. In total contrast, another post-modern argument sees all boundary setting leading to hierarchy and eventual oppression. Deluze and Guttari, for example, suggest that boundaries must be constantly contested by what they call "nomads," or militants advocating partial perspectives that resists all demands to globalize or hierarcize.[77] I come down somewhere in between these opposing arguments and favor a contingent and provisional use of boundary making as a basis for critical post-modern cartography. In this way, maps can also be practical. They can provide individual and community orientation to and in practice, and they can help us see and organize proliferating knowledge communities producing an ever expanding textual discourse.[78]

Figure 3 below presents a textually derived meso mapping of paradigmatic worldviews and theoretical perspectives entering into and intertwined in a specific educational reform practice. This visual representation, in contrast to Figure 2, describes a specific national

educational change practice at a particular time and place--i.e., in Nicaraguan higher educational reform efforts in the early 1980's. It begins to suggest how ideas and social practices interconnect. Here practice is viewed as a hermeneutic circle where four major stakeholder groups in the reform practice bring their guiding worldviews, theoretical perspectives and purposes into a goal oriented interactive educational change process.[79] Where Figure 3 suggests actors, behavior and accomplishments within the context of everyday life, Figure 2, offers a systemic juxtaposition of the sources of intellectual energy identified in paradigmatic exemplars and the interaction of theoretical perspectives. With such perspectivist maps of various levels of the micro-meso-macro continuum, educational policy researchers can now move beyond modernism's arbitary dichotomies and absurd oppositions to situate themselves within the multiple levels of reality in which they are players. And by becoming mappers, they will help to make educational studies a more reflexive and spatial field whose subject matter increasingly encompasses itself. They can also gain what Bourdieu sees as "an extraordinary autonomy, especially when you don't use it [i.e., cognitive mapping] as a weapon against others, or as an instrument of defense, but rather as a weapon against yourself, as an instrument of vigilance."[80]

FIGURE 3 ABOUT HERE

Conclusion

This study has used discourse analysis and phenomenographic method to examine the weave of discourses and practices about educational change in comparative and international education texts over time as bricolage--i.e., as historically locatable assemblages of cultural codes and practices; and as cognitive maps spacing discursive formations and ways of thinking at macro and meso levels of social reality. Three major orientations to knowledge in the field over time are identified as the orthodox, the heterodox, and the emerging heterogeneous. Relations between discourse communities today are also identified and discussed noting that comparative educators and their texts are becoming more reflexive and eclectic thus allowing new ideas and new mapping opportunities to emerge from the reinscription of earlier theories and the changing spatial relations of our time.

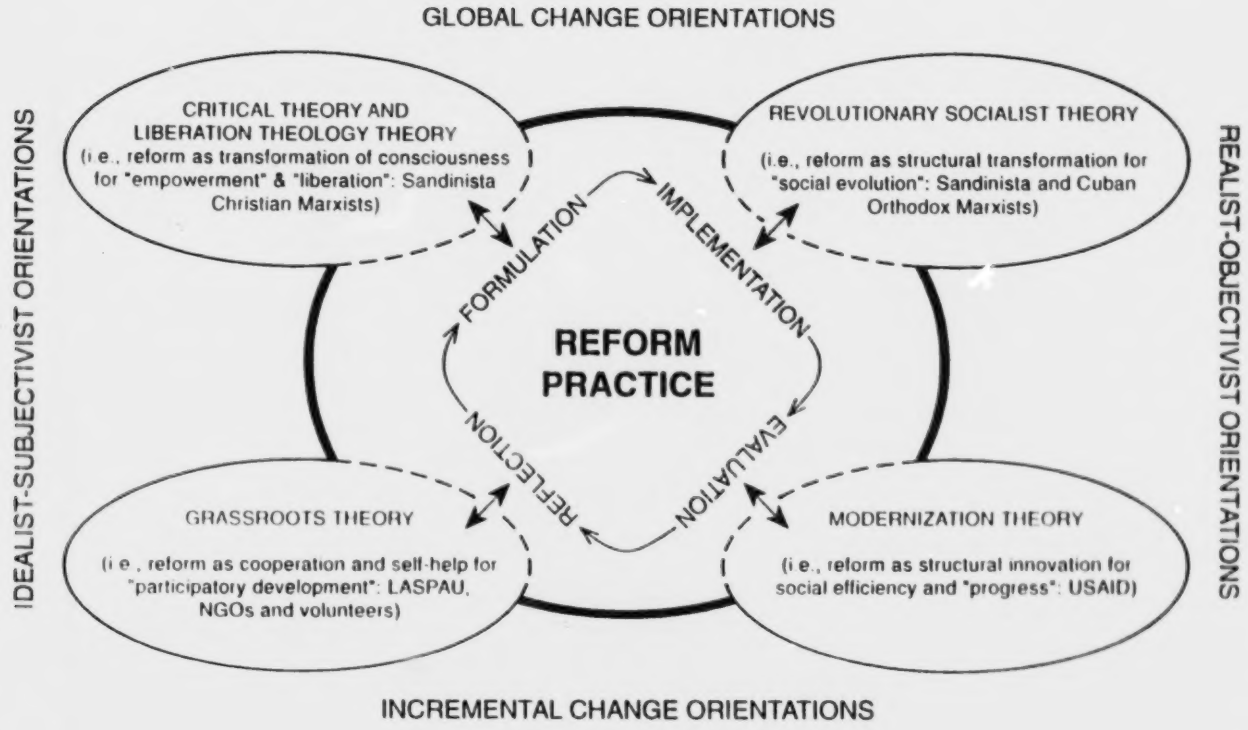
GLOBAL CHANGE ORIENTATIONS
CRITICAL THEORY AND LIBERATION THEOLOGY THEORY
(i.e., reform as transformation of consciousness for "empowerment" & "liberation": Sandinista Christian Marxists)
REVOLUTIONARY SOCIALIST THEORY
(i.e., reform as structural transformation for "social evolution": Sandinista and Cuban Orthodox Marxists)
IDEALIST-SUBJECTIVIST ORIENTATIONS
REALIST-OBJECTIVIST ORIENTATIONS
FORMULATION
IMPLEMENTATION
REFLECTION
EVALUATION
REFORM PRACTICE
GRASSROOTS THEORY
(i.e., reform as cooperation and self-help for "participatory development": LASPAU, NGOs and volunteers)
MODERNIZATION THEORY
(i.e., reform as structural innovation for social efficiency and "progress": USAID)
INCREMENTAL CHANGE ORIENTATIONS

Figure 3. **A meso mapping of social and educational change perspectives discovered in Nicaraguan higher educational reform discourse.**

Source: Paulston & Rippberger (1991): 194

ENDNOTES

1J. Smith, *Mystical Rhetoric* (London, 1657): 150.

2R. Rorty, *Contingency, Irony and Solidarity* (Cambridge: Cambridge University Press, 1989): 135.

3D. Weinstein and M.A. Weinstein, "Postmodernizing (Macro) Sociology." *Sociological Inquiry*, 63(1993): 224-225.

4An explanation of Bourdieu's interactive field of power, see his "Social and Symbolic Power." *Sociological Theory* 7(1989): 14-25. Bourdieu's mapping rationale argues that social and intellectual worlds may be uttered and constructed in different ways according to different principles of vision and division, that failing to construct the space of positions leaves you no chance of seeing the point from which you see what you see. And because the struggle over boundaries and classifications such as maps is a fundamental dimension of class struggle, "to change the world one has to change the ways of world making, that is, the vision of the world and the practical operations by which groups are produced and reproduced" (p. 23).

5R. Barthes, "From Work to Text" in *Textual Strategies: Perspectives in Poststructural Criticism*, ed. J. Hariri, (Ithaca: Cornell University Press, 1979): 48-63. Barthes argues that textual understanding is related to social and political understanding. Where modernist science has traditionally viewed language as a transparent instrument or tool devoid of ideational or practical content, literary theory sees language as opaque and seeks to penetrate this opacity in order to recover the commitments and practices contained in language. My choice has been to see this reading as mythic. See P. Ricoeur, "The Model of the Text: Meaningful Action Considered as a Text," in *Interpretive Social Science*, eds. R. Rabinow and W. Sullivan (Berkeley: The University of California Press, 1979):73-102. Others have see readings as "violent" (Foucault), "social" (Liebman), "political" (Jameson), "rhetorical" (Gadamer), or "ludic" (Baudrillard). These and other orientations to textual exegesis are examined in M. Shapiro, "Literary Production as a Politicizing Practice," in *Language and Politics*, ed. M. Shapiro (New York: New York University Press, 1984): 215-254.

6G. Olsson, "Invisible Maps: A Prospectus," *Geografiska Annaler* 73(1991): 91.

7Illustrative texts of the 1950s and 1960s subjected to analysis are: D. Adams and J. Farrell, "Societal Differentiation and Educational Differentiation," *Comparative Education* 5 (1959): 249-262; C. Anderson, "The Methodology of Comparative Education," *International Review of Education* 7 (1961): 1-23; G. Bereday, *Comparative Method in Education* (New York: Holt, Reinhart and Winston, 1964); T. Husén, ed., *International Study of Achievement in Education: A Comparison of Twelve Countries*, (Stockholm: Almquist and Wiksell, 1967); H. Noah and M. Eckstein, *Toward A Science of Comparative Education* (New York: Macmillan, 1969); and T. Schultz, "Education and Economic

Growth," in *Social Forces Influencing American Education*, ed. N. Henry, (Chicago: University of Chicago Press, 1961: 46-88.

Texts from the 1970s and 1980s are C. A. Anderson, "Comparative Education Over a Quarter of a Century: Maturity and Challenges," *Comparative Education Review* 21 (1977): 405-416; P. Bourdieu and J. Passeron, *Reproduction: In Culture, Education, Society* (Beverley Hills: Sage, 1977); S. Bowles and H. Gintis, *Schooling in Capitalist America* (New York; Basic Books, 1976); M. Carnoy, "Marxism and Education," in *The Left Academy: Marxism On American Campuses*, eds. B. Ollman and E. Vernoff (New York: Praeger, 1984): 79-98; R. Clignet, "The Double Natural History of Educational Interactions: Implications for Educational Reforms," *Comparative Education Review* 25 (1981): 330-352; E. Epstein, "Currents Left and Right: Ideology in Comparative Education," *Comparative Education Review* 27 (1983): 3-29; R. Heyman, "Comparative Education From An Ethnomethodological Perspective," *Comparative Education*15 (1979): 241-249; T. Husén, "Research Paradigms in Education," *Interchange* 19 (1988): 2-13; J. Karabel and A. Halsey, eds., *Power and Ideology in Education* (London: Oxford University Press, 1977); G. Kelly and A. Nihlen, "Schooling and the Reproduction of Patriarchy" in *Cultural and Economic Reproduction in Education*, ed., M. Apple (London: Routledge and Kegan Paul, 1982: 162-180; and R. Paulston "Social and Educational Change: Conceptual Frameworks," *Comparative Education Review* 21 (1977): 370-395.

Texts from the 1990s are P. Altbach, "Trends in Comparative Education, "*Comparative Education Review* 35 (1991): 491-507; R. Cowen, "The National and International Impact of Comparative Education Infrastructures," in *Comparative Education: Contemporary Issues and Trends*, ed. W. Halls (Paris: UNESCO, 1990); P. Lather, *Getting Smart: Feminist Research and Pedagogy Within the Post--Modern* (London: Routledge, 1991); V. Masmann, "Ways of Knowing: Implications for Comparative Education," "*Comparative Education Review* 34 (1990): 465-473; R. Paulston, "Comparative and International Education: Paradigms and Theories" In *International Encyclopedia of Education* (Oxford: Pergamon Press, 1993); R. Paulston and M. Tidwell, "Latin American Education--Comparative" in *The AERA Encyclopedia of Education* (New York: McMillan, 1992); V. Rust, "Postmodernism and Its Comparative Education Implications," "*Comparative Education Review* 35 (1991): 610-626; N. Stromquist, "Gender Inequality In Education: Accounting for Women's Subordination," *British Journal of Sociology of Education* 11 (1990): 137-154; H. von Recum, "Erziehung in der Post-moderne" (Education in the Postmodern Period), *Die politesche Meinung* 237 (1990): 76-93.

8E. Gottlieb, "The Discoursive Construction of Knowledge." *International Journal of Qualitative Studies in Education*, 2(1989): 131-132.

9Anderson, *International Review of Education*, p. 11.

10Bereday, *Comparative Method*, pp. 4-9.

11Noah and Eckstein argue for a combination of E. Nagel's logical positivism and K. Popper's hypothesis testing approaches. See their Ch. 10, "Scientific Method and Comparative Education" pp. 112-122.

12See, for example, Rorty, Chapter Three where he argues that thinkers such as Nietzsche, Freud and Wittgenstein have along with Dewey enabled societies to see themselves ironically, as historical contingencies, rather than as expressions of underlying, a historical human nature or as realizations of suprahistorical goals. For an influential critique of positivism by this author, see his *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979).

13Husén, *International Study of Achievement in Mathematics*, pp. 2, 71-72.

14Adams and Farrell, p. 257.

15*Ibid*, p. 261.

16N. Wiley, "The History and Politics of Recent Sociological Theory," in *Frontiers of Social Theory: The New Syntheses*, ed. G. Ritzer (New York: Columbia University Press, 1990), 392-416.

17S. Klees, "The Economics of Education: Is That All There Is?" *Comparative Education Review*, 35(1991): 721-734.

18The emergence of a global comparative education field is well documented in *Emergent Issues In Education: Comparative Perspectives*, ed., R. Arnove, P. Altbach, and G. Kelly (Albany: SUNY Press, 1992), Passim.

19Althusser, *Philosophy and the Spontaneous Philosophy of the Scientists* (London: Verso, 1990). See especially pp. 1-42, "Theory, Theoretical Practice, and Theoretical Formation" where Althusser's deterministic structural reproduction arguments from the 1960s are reprinted.

20Bowles and Gintis, pp. 132-134, 195-199, and 208-211.

21Carnoy, pp. 83-87.

22Karabel and Halsey, p. 71.

23Kelly and Nihlen, pp. 162-163.

24See, for example, S. Star "The Sociology of the Invisible," in *Social Organization and Social Process*, ed. D. Maines (New York: Aldine De Gruyter, 1991): 265-283.

25Heyman, pp. 241-243.

26Clignet, pp. 331-334.

27Paulston, *Social and Educational Change*, pp. 371-374; and Epstein, pp. 3-6.

28See Paulston, *Ibid*, pp. 372-273, 28.

29See Masemann; Lather; and *interalia*, N. Stromquist, "Determinants of Educational Achievement of Women in the Third World," *Review of Educational Research* 59(1989): 143-183.

30Anderson, "Comparative Education Over A Quarter of A Century," p. 413. R. Lawson made the first major pluralist counter-attack on attempts by Anderson and his students to enclose the field in functionalist logic and scientistic methods--i.e., the "Chicago Orthodoxy." In his heretical 1975 presidential address, "Free-Form Comparative Education" *Comparative Education Review* 19 (1975): 345-353. Lawson opposed "the application of a political religion to social science," the denial of legitimate opposition, and the enclosure of all scholarly activity within an orthodoxy of narrow political parameters (pp. 345-346).

31Altbach, *Trends in Comparative Education*, pp. 504-506. For a continuation of this movement, see Paulston, "Ways of Seeing," pp. 177-202.

32See the debate in "Colloquy On Comparative Theory" *Comparative Education Review*, 34(3) (1990): 369-404.

33See also Rust, pp. 614-616.

34Husén, pp. 10-12.

35Paulston, *Comparative and International Education*, pp. 254-255.

36R. Barthes, p. 61. M. de Certeau claims, in this regard that ". . . narrative structures have the status of spacial syntaxes," that all discourse suggests a positioning in space, and that such imaginary spatial trajectories invite comparison. I would also argue for a conceptual mapping that links the concept-metaphor of textuality with the provisional structure of topography. From this view, texts communicate not only an order of signs (i.e., semiology), but have validity for a more philosophical portrayal of the "experience of space" (i.e., in cognitive mapping) as well. See M. de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1984; and B. Bartolovich, "Boundary Disputes: Textuality and the Flows of Transnational Capital." *Meditations* 17(1992): 27.

37See C. Cherryholms, *Power and Criticism: Post-Structural Investigations in Education* (New York: Teachers College Press, 1988); von Recum, pp. 12-16; and Rust, pp. 622-624; and M. Liebman and R. Paulston, Social Cartography: A New Methodology For Comparative Studies. Paper presented at the AERA Annual Meeting, New Orleans, April 4-8, 1994.

38For influential examples of earlier postmodern turns in anthropology and cultural geography respectively, see J. Clifford and G. Marcus, eds. *Writing Culture: The Poetics and Politics of Ethnography* (Berkeley: University of California Press, 1986; and T. Barnes and J. Duncan, eds. *Writing Worlds: Discourse, Text, and Metaphor in Representations of Landscape* (London: Routledge, 1992).

39For an argument that economists and their "crassly materialistic view of education" and "treatment of schools as manpower factories" helped to produce development education failures, see Coombs, pp. 14-20.

40Schultz, "Investment in Human Capital," pp. 4-13 and Schultz, "Investing in People," pp. 219-223.

41Klees, pp. 731-733 and J. Lauglo, "Vocational Training and the Bankers' Faith in the Private Sector," *Comparative Education Review* 36 (1992): 227-236. From a critical pragmatic perspective, Lauglo critiques World Bank efforts to train human resources for modernization projects as biased in favor of neo-classical economics and the private sector, as "too narrow to suit changing conditions." In the Bank's operational work "They come in and . . . tell you what you need." Their view of change is evolutionary and unilinear. Their theoretical orientation is eurocentric, lacking in cultural sensitivity, and comes across "as ideological (or as aloof economic theorizing) rather than rooted in experience" (p. 232).

42Rondinelli, et al., pp. 53-63.

43Plank, pp. 557-559.

44See N. Luhmann, "The Paradox of Systems Differentiation and the Evolution of Society" in *Differentiation Theory and Social Change: Comparative and Historical Perspectives*, eds. J. Alexander and P. Colony (New York: Columbia University Press, 1990): 63-91 and J. Schriewer and E. Keiner, "Communication Patterns and Intellectual Traditions," *Comparative Education Review* 36 (1992): 25-51. Luhmann's objectification of the subjective realm expands reality to include both realist and relativist world views as required by "autopoetic" or self-referential systems. From this de-humanized and totalizing perspective, actions are not seen to be produced by actor's subjective motives, but by the needs of complex systems to manage their own reproduction, i.e., to transform noise into information which keeps in motion the self-referential network of internal processes. Luhmann claims that his story of complex systems can fill all the space of knowledge, that it will put an end to controversies between positivists and dialecticians, and between scientists and humanists, See his "Insistence On Systems Theory: Perspectives From Germany." *Social Forces* 61(4) (1983): 987-998.

45Turner, 1987, pp. 158-163.

46Coleman, pp. 153-159, 170-172.

47See J. Elster, "Further Thoughts On Marxism, Functionalism and Game Theory," in *Analytic Marxism*, ed. J. Roemer (Cambridge: Cambridge University Press, 1986): 36-59.

48For an excellent review, see R. Collins, "Conflict Theory and the Advance of Macro-Historical Sociology," in Ritzer: pp. 68-87.

49See Archer, Chs. 6, 7 and 8.

50Bourdieu and Passeron, pp. 4-5, 141 and 217.

51Examples are to be found in, among others, Paulston, "Education As Antistructure," pp. 64-65; and Weiler, pp. 300-304.

52S. Bowles and H. Gintis, *Democracy and Capitalism* (New York: Basic Books, 1986): 176-213.

53Carnoy and Samoff, pp. 3-13, 377-380. For a sympathetic yet rigorous critique of Marxist theories of schooling, see D. Liston, *Capitalist Schools: Explanation of Ethics in Radical Studies of Schooling* (New York: Routledge Chapman and Hall, 1988). Liston sees traditional Marxist explanations trapped within a functionalist view of schools--i.e., they use effects to explain events: they lack researchable propositions, and they lack empirical assessments of radical functionalist claims. Instead, he advocates a plurality of methodological approaches to study educational change efforts with "the empirical scientific" orientation being appropriate for questions of causality within structural relations, and the "hermeneutic-interpretive" orientation appropriate to questions of cultural and personal meaning. F. Jamison has also proposed an ambitious reconceptualization of the radical structuralist perspective. His "cognitive mapping" strategy provides a conception of social totality that includes both the micro view of individual experience, and the macro view of saturated and enormously complex new international space now thoroughly penetrated by what he calls hyper-capitalism. Such maps--as yet to be created--would, he claims, have "the great merit of stressing the gap between the local positioning of the individual subject and the totality of class structures in which he or she is situated, a gap between phenomenological perception and a reality that transcends all individual thinking or experience. This ideology attempts to span or coordinate, to map, by means of conscious and unconscious representations" (p. 353). See his highly original chapter, "Cognitive Mapping" in *Marxism and the Interpretation of Culture*, eds. L. Grossberg and C. Nelson (Urbana: University of Illinois Press, 1988): 347-357.

54See, for example, Weiler, p. 303 and Welsh, p. 508-531. In his characterization of comparative education texts, Welsh notes the choice of a "broadly functionalist, positivistic perspective: from 1930-1970; the addition of critical and interpretive views during the 1970s; and after 1980, the use of neo-Weberian and micro-macro knowledge

perspectives as well. See his "mapping" study, "Class, Culture and the State in Comparative Education." *Comparative Education* 29(1993): 7-27.

55For an explanation of how Habermas sees Mead's social psychology as clearing "the way for a communication concept of rationality" see J. Habermas, "The Paradigm Shift in Mead: The Foundations of Social Science in the Theory of Communication," in *Philosophy, Social Theory and the Thought of George Herbert Mead*, ed. M. Aboulafia (Albany: State University of New York Press, 1991):137-168.

56Arnove, pp. 48-54.

57See P. Altbach, *The Knowledge Context: Comparative Perspectives on the Distribution of Knowledge* (Albany, SUNY Press, 1987).

58See for example, N. Stromquist's "Educating Women: The Political Economy of Patriarchal States," *International Studies in Sociology of Education* 1 (1991): 111-128; and "Women and Literacy: Promises and Constraints," *Annals, AAPSS* 520 (March, 1992): 54-65. Here feminist perspectives are brought to bear on problems of structured inequality to help make the invisible visible, and to produce valuable new knowledge.

59Foley, pp. 548-551; and Weis, pp. 11, 14-15 and 214.

60See Cherryholms, Chs. 1 and 8; and Rust, pp. 614-616.

61J. Derrida, *Speech and Phenomena* (Evanston: Northwestern University Press, 1973). The postmodern political agenda evidences a stoic bias and a paradoxical irresolution of things in the world. See, for example, the brilliant if deeply nihilistic theoretical narrative by J. Baudrillard, *Revenge of the Crystal: Selected Writings on the Modern Object and Its Destiny, 1968-1983* (London: Pluto Press, 1990), and especially his nightmare vision in "Mass Media Culture," pp. 63-98.

62J.F. Lyotard, *The Differend: Phrases in Dispute* (Minneapolis: University of Minnesota Press, 1988): 20-38. Foundationalist discourse seeking to establish universals or to provide true accounts of phenomena in the world is viewed from a post-modernist perspective as nostalgia. In their style, postmodern texts reject all totalizing ambitions of modernist social science. All knowledge, both personal and communal, is to be critically examined and continually underminded through paralogical deconstruction. While postmodernism in the abstract is unescapably relativistic and nihilistic, in practice growing numbers of academics have selectively appropriated new ideas from this perspective to question our fragmenting cultural order and to retheorize modernist theories of resistance, i.e., feminism, critical theory, Marxism, dependency theory, and the like. Above all postmodernism directs our attention to problems of difference, and to the Other in a global electronic society. Ironically, it welcomes new ways of seeing, as in this chapter, and then undermines them. For a penetrating yet fairminded critique of contradictions and absences embedded in the post-modern perspective, see J. Duncan

and T. Barnes, eds. *Writing Worlds: Discourse, Text and Metaphor in the Representation of Landscape* (London: Routledge, 1992): 248-253.

63S. Best and D. Kellner, *Postmodern Theory: Critical Interrogations* (New York: Guilford Press, 1991): 4-5, 170. See also R. Paulston and M. Liebman, "An Invitation to Post-Modern Social Cartography." *Comparative Education Review*, 38 (1994). Forthcoming.

64M. Foucault, *Power/Knowledge* (New York: Pantheon, 1980).

65Examples may be seen in E. King, "The Expanding Frontier of Pluralism." *Comparative Education* 19 (1983): 227-230; in his earlier study of practice, *Other Schools and Ours* 5th ed. (London: Holt, Rinehart, and Winston, 1979); and "Commentary: Observations from Outside and Decisions Inside," *Comparative Education Review* 34 (1990): 392-394. For an outstanding presentation of how critical pragmatism views educational change problems, see C. Cherryholms, "Modernity, Pragmatism, and Educational Change," in *Discourse and Power in Educational Administration*, eds. D. Corson and A. Hargreaves (1994). Forthcoming.

66See A. Neiman, "Ironic Schooling: Socrates, Pragmatism and the Higher Learning." *Educational Theory* 41 (1991):371-384.

67Avalos, pp. 9-12, 158-164.

68Gibson and Ogbu, see Chapter I.

69As in Spindler and Spindler, see Chapters I and II.

70H. Ross, et al. "On Shifting Ground: The Post Paradigmatic Identity of U.S. Comparative Education." *Comparative Education* 22(1992): 113-131 where changing ways of seeing the field of comparative education are presented.

71G. Helmstad and F. Marton. Conceptions of Understanding. Paper presented at the AERA Annual Meeting, San Francisco, CA, April 20-24, 1992.

72See F. Marton "Phenomenography" and The Art of Teaching All Things to all Men," *Qualitative Studies in Education* 5 (1992): 253-268; and my study "Ways of Seeing Education and Social Change in Latin America: A Phenomenographic Perspective." *Latin American Research Review* 27(1992): 177-202. Drawing the boundaries of textual dispositions or categories is, of course, controversial. The anti-interpretive textualists argue for "system, interconnection and seamlessness." The structuralists call for at least provisional boundaries so as to confront those who draw boundaries of superordination in the social milieu. James Clifford concedes that "the free play of readings may in theory be infinite . . . [but] . . . there are at any historical moment [only] a limited range of allegories available." See Bartolovich, p. 29.

73See Anderson, pp. 20-21; Paulston, *Social and Educational Change*, pp. 372-373; Epstein, pp. 5 and 6; and Adams, p. 409.

74For a discussion of maps as socially embedded discourse see B. Harley's highly original essay, "Maps, Knowledge, and Power," in *The Iconography of Landscape: Essays On the Symbolic Representation, Design, and Use of Past Environments*, eds. D. Cosgrove and S. Daniels (New York: Cambridge University Press, 1988):123-138.

75Bartolovich, p. 23.

76For related attempts using figural space to map cognitive constructs, see for example, C. Hampden-Turner, *Maps Of the Mind* (New York: Macmillan, 1982) with 60 provocative maps that combine text and visuo-spatial imagery; K.W. McCain, "Mapping Authors In Intellectual Space: A Technical Overview." *Journal of the American Society for Information Science* 41 (1990):433-443 where superficial author co-citation analysis (ACA) using computers produces three-dimensional maps of clusters claiming to interrelate ". . . subject areas, research specialties, schools of thought, shared intellectual styles, or temporal or geographic ties"; and M. Lynch, "Pictures of Nothing? Visual Construals in Social Theory." *Sociological Theory* 9 (1991):1-21 where the author draws upon ethnomethodological and social constructivist studies of representation in the natural sciences. He finds that labels, geometric boundaries, vectors and symmetries may be used as a sort of "rhetorical mathematics" to convey the impression of rationality. While such "theory pictures" show little beyond what a text says in its writing, they are valuable in their ability to simulate a hermeneutic passage from written ideas to an independent representational or mathematical space. Here maps can provide an independent "work space" that reflexively informs a reading and make possible, as in this chapter, the representation of intellectual fields as theoretical landscapes.

77See Bartolovich, p. 30.

78See J.B. Harley, "Deconstructing the Map," *Cartographica* 26 (1989):1-20; and S.S. Hall, *Mapping the Next Millennium: The Discovery of the New Geographies* (New York: Random House, 1992). I view the emergence of new theory as a local process that takes place in competing language communities. Differences between communities are primarily between the "facts" i.e., the cultural code that each emphasizes, and the metaphors each employs. The application of old beliefs to new circumstances may accordingly be seen as an attempt to identify similarities and differences, making the acquisition of new theory an inherently metaphorical process. Here, the task for policy analysis shifts to interpretation of discourse and to new ways or metaphors--such as mapping--in which the representation of difference may be presented. From this perspective, Arib and Hesse argue that ". . . to make explicit the ramifications of metaphor [mapping] is to engage in critique, evaluation, and perhaps replacement. Metaphor [mapping] is potentially revolutionary." See M. Arib and M. Hesse, *The Construction of Reality* (Cambridge: Cambridge University Press, 1986): 156. For help in using internal grounds rather than an absolute benchmark assessment to evaluate

metaphors in context, Hesse has provided a useful formal framework to assess the suitability of metaphor in identifying similarity. See M. Hess, "The Explanatory Function of Metaphor," in *Revolutions and Reconstructions in the Philosophy of Science* (Brighton: Harvester, 1980): 111-124.

79See Paulston and Rippberger, pp. 193-194.

80P. Bourdieu, *In Other Words: Essays Towards a Reflexive Sociology* (Stanford: Stanford University Press, 1990): 27.